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Denise is reading *Mansfield Park* by Jane Austen, *Turning the Mind into an Ally* by Sakyong Mipham, *Ethics for the New Millennium* by the Dalai Lama, and *Marley and Me* by John Grogan.

This occasional column will focus on topical issues related to public library research and statistics. What do you need to know? Send ideas for topics to Kathleen Hughes, Editor of *Public Libraries*, at khughes@ala.org.

A Comparison of Public Library Data

PLDS in Context

For those new to public library data there are two primary reporting venues: the PLA Public Library Data Service (PLDS),¹ a voluntary survey of public libraries, and the national system that collects data from all public libraries. The national public library data program was established in the 1980s by state libraries, the National Center for Education Statistics (NCES), and the National Commission on Libraries and Information Science (NCLIS), and recently was transferred to the Institute of Museum and Library Services (IMLS).²

Both the PLA and the IMLS data sets are available online, have peer tools for comparison, and print summary reports. The PLDS includes responses from Canadian public libraries; the IMLS is limited to U.S. states, territories, and the District of Columbia. The online data files and utilities developed by PLA and NCES/IMLS are useful for forming peer groups, comparing specific library characteristics across a range of libraries, or for downloading in full by librarians or library researchers interested in analysis beyond that supported by the predetermined criteria established in each of the survey comparison tools.

The differences between the two surveys (PLDS and IMLS) are considerable both in range of data reported, survey methods, and editing procedures. Despite the differences in the two surveys (thereby creating inherent differences in the final data sets), comparisons are possible by a few characteristics—funding, services, staffing, and total collections.

The research question is: Can the PLDS data be used for early identification of trends in library funding and expenditures? Yes and no.

Get your copy of the *PLDS Statistical Report 2008*. See the order forms on pages 30 and 31 of this issue.

Issues to Consider Data Quality—Census versus Self-Selection

Not only do the survey questions vary, but so do response rates. Whereas the IMLS data series is a universe of public libraries, the PLA series reflects only those libraries that choose to participate, and this may vary year to year.³ This means that longitudinal comparison is not possible because with the PLDS a library can opt in or out of the survey. In addition to being a universe of public libraries, the IMLS data are edited to improve quality and missing values are imputed. Imputation is a mathematical method of estimating what a response might have been for a specific question. Imputations for missing responses are only used to prepare national estimates; the imputed figure is not present in the individual library response record.

Many state libraries subscribe to a data reporting utility—Bibliostat Collect—for the coordinated national survey.⁴ This utility leverages the federal editing criteria, as well as specific state editing requirements, to improve the quality of initial responses from libraries. About forty states are using this software to collect data from their public libraries, and other states have their own reporting methods that often include response edit checks. Libraries reporting to the PLDS survey are often using the locally edited data, thereby increasing the comparability of responses between the two surveys. The PLDS data benefit from these preliminary edits and publish about one year ahead of the IMLS data. Further, PLA provides linking to its data files within the Bibliostat Collect utility thereby providing access to data for libraries in states that may not be using the Bibliostat Collect tool.

Reporting Most Current Fiscal Year

One of the biggest issues for both of the data sets is the ability of a library to report in a timely way because of its fiscal year. Libraries do not share common fiscal years, and this variation adds to the complexity of reporting library data at both a state and national level. The PLDS is releasing data within a year of collection (e.g., fiscal year 2007 library data are published in summer/fall 2008) because libraries that can participate do. For the IMLS data, publication may take as much as two calendar years from the close of the annual survey because of the number of libraries reporting and the variations in local fiscal years. Further, the IMLS data undergo additional quality checks beyond those available to libraries through their state reporting. Points go to PLA for quick turnaround, but with the caveats already mentioned.

Response Rates

Overall, the response rate for the 2007 PLDS, which reports for fis-

cal year 2006, was 883, about 9.6 percent of the universe of U.S. public libraries. As noted in figure 1, response was highest among libraries serving the largest population ranges. Between 61 and 96 percent of libraries serving more than 100,000 residents responded to the *PLDS Statistical Report 2007*. About 9.2 percent (851) of U.S. public libraries responded to the *PLDS Statistical Report 2008* (fiscal year 2007).

How the Data Hold Up— Library Revenue and Expenditures

Both the PLDS and IMLS surveys collect core revenue (sometimes referred to as income or funding) and expenditures data. Library revenue data reported in both surveys are characterized by source—local, state, federal, and other—and library expenditures by broad category—staffing (salary/benefits), collections, and the catch-all other. Each survey has definitions to guide libraries in reporting these figures and, for the most part, the definitions are comparable. The PLDS reports responses

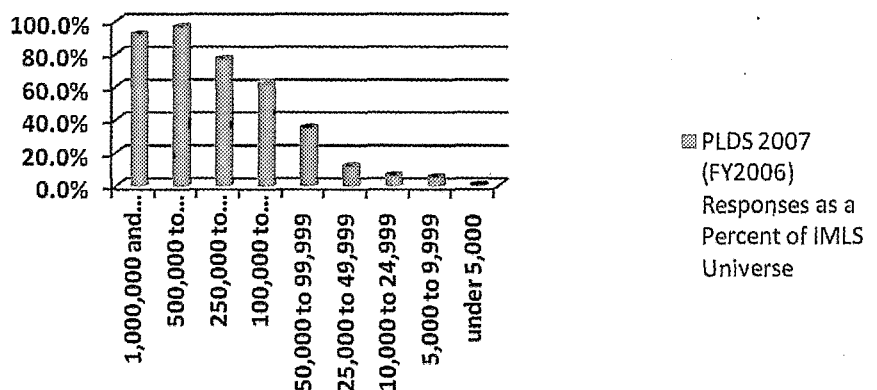


Figure 1. PLDS 2007 (FY2006) Responses as a Percent of IMLS Universe by Population Served

in means (averages) and quartiles, as well as the highest and lowest reported response. The IMLS data are reported in a variety of ways—totals by state and nationally, by population served range, as per capita, and percentage distributions.

The PLDS 2007 (FY2006) and the IMLS FY2005 data sets are used for the purposes of this analysis. Keep in mind that PLDS response rates will impact results as compared with the IMLS data, and variations in the actual figures reported even in population served ranges where response rates are strong may vary from IMLS. The data align more closely when viewed proportionally—percentages within population served ranges. This will become more evident as the figures are discussed. Figures 2 and 3 provide detail on operating revenue reported to the PLDS and IMLS surveys, and figure 4 compares them.

As noted in figure 4, the distributions of funding by source varied enough from the census of library reported to IMLS for two population served ranges: 100,000 to 249,999 and communities serving fewer than 5,000. It is interesting to note that there is little difference in the overall proportion of funding distributions between the PLDS FY2006 and the IMLS FY2005.

This can be explained by

the high responses from libraries serving larger communities (see figure 3). The very low response from the smallest public library communities does not impact the summary results. Even though there are many more libraries serving smaller communities (about 78 percent of libraries—7,194—are in communities serving fewer than 25,000 people), their funding levels do not significantly impact the overall picture of library funding when such a high proportion of larger public libraries report (see figure 1).

Given libraries serving smaller communities have lower overall responses to the PLDS, those data should be used with caution and it is recommended that the IMLS data be used for libraries in communities under 25,000. This is not to discourage response to the PLDS, but rather to encourage it. Since data timeliness is critical, all libraries are encouraged to respond to the PLDS.

There are some anomalies that emerge when comparing PLDS and IMLS data despite the higher response rates for libraries serving 100,000 to 249,999 (see figure 4). It is important to understand that the proportions of funding data by source (e.g., local, state, etc.) do not vary significantly year to year. That is, the proportions of funding by source reported by IMLS remain fairly consistent over time. Therefore, comparison of the PLDS and IMLS data presented in figure 4 are useful to consider despite the difference in fiscal years used for comparison (2005 and 2006, respectively).

For libraries serving 100,000 to 249,999, the following differences exist:

- Local revenue is lower than national reporting by about 3.7 percent (79.3 percent versus 83 percent).
- State revenue is lower by about

Population of Legal Service Area	Local	State	Federal	Other
1,000,000 and above	85.7%	5.2%	0.5%	8.6%
500,000 to 999,999	81.5%	10.0%	0.4%	8.1%
250,000 to 499,999	77.8%	13.8%	0.4%	8.1%
100,000 to 249,999	79.3%	7.2%	0.4%	13.1%
50,000 to 99,999	79.0%	13.1%	0.2%	7.7%
25,000 to 49,999	83.3%	9.2%	0.2%	7.3%
10,000 to 24,999	83.4%	8.0%	0.5%	10.3%
5,000 to 9,999	79.0%	9.7%	0.3%	7.5%
Less than 5,000	71.2%	16.8%	0.8%	11.2%
Total: N = 883	81.3%	9.2%	0.4%	9.1%

Figure 2. PLDS 2007 (FY2006) Percentage Operating Revenue by Source, U.S. Libraries Reporting

2.3 percent (7.2 percent versus 9 percent).

- Other sources of revenue (non-tax dollars) is nearly twice that of nationally reported figures (13.1 percent versus 7.1 percent).

For libraries in the smallest communities, the following differences exist:

- State revenue accounted for more than twice that in the federal survey (16.8 percent versus 7.2 percent).
- Other revenue (non-tax dollars) was about 7 percent lower than what is typically reported nationally.

Local operating revenue per capita reported by PLDS respondents versus the universe of public libraries are presented in figure 5. Although different fiscal years, the gap in reported local income grows

the smaller the library. Surprisingly, the proportion of expenditures reported in the PLDS is reasonably close with that reported by the universe of public libraries (see figure 6). It may be that what libraries report in the PLDS under specific income categories is more accurately reported in the IMLS data as a result of the editing processes. Many smaller libraries may attribute income to local sources when, in fact, the funding comes from a variety of non-local tax support. This type of correction would be made in collaboration with state library staff before data are reported as final by IMLS.

The comparability of expenditures reported between the PLDS and IMLS data may be the result of a number of factors, including budgeted expenditures being reported versus actual expenditures or that expenditures may be more easily and accurately tracked by libraries

of all sizes. Regardless the reason, the variation in reported income between the PLDS and IMLS surveys raise a flag of caution, whereas the closer proportional alignment of the expenditures data does not. It would be reasonable to use the PLDS expenditures data to track trends for any size library.

Other Pesky Data

About every four years the PLDS asks supplemental finance questions (1998, 2001, 2005, and 2008). These detail how many libraries charge for services; sources of funding including detail for E-Rate discounts, state aid, and federal Library Services and Technology Act (LSTA) funding administered by state libraries; and, alternative sources of income (e.g., funding from foundations, overdue fines, rentals, interest, and so on). These data are useful for a number of reasons—PLDS is perhaps the

only aggregated source of this information (especially state aid and E-Rate discounts), the response rates are robust with little drop-off from the core survey to the supplemental questions, and it is possible to benchmark a library against its peers for many of the items reported.

The added value of having this periodic detail is

Population of Legal Service Area	Local	State	Federal	Other
1,000,000 and above	81.1%	6.3%	0.7%	11.9%
500,000 to 999,999	83.5%	9.1%	0.4%	7.0%
250,000 to 499,999	80.0%	11.7%	0.4%	7.9%
100,000 to 249,999	83.0%	9.5%	0.5%	6.7%
50,000 to 99,999	80.7%	11.1%	0.5%	7.7%
25,000 to 49,999	83.4%	8.8%	0.3%	7.5%
10,000 to 24,999	81.7%	8.7%	0.4%	9.2%
5,000 to 9,999	78.2%	9.9%	0.5%	11.4%
Less than 5,000	73.1%	7.2%	1.1%	18.5%
Total:	81.5%	9.6%	0.5%	8.4%
N = 9,198				

Figure 3. IMLS FY2005 Percentage Operating Revenue by Source, All U.S. Libraries

	Population Served		Percentage for All Population Served Ranges
	100,000 to 249,999	Less than 5,000	
PLDS 2007 (FY2006)			
Local	79.3%	71.2%	81.3%
State	7.2%	16.8%	9.2%
Federal	0.4%	0.8%	0.4%
Other	13.1%	11.2%	9.1%
IMLS FY2005			
Local	83.0%	73.1%	81.5%
State	9%	7.2%	9.6%
Federal	0.8%	1.1%	0.5%
Other	7.1%	18.5%	8.4%

Figure 4. Percentage Operating Revenue by Source, PLDS and IMLS

Population of Legal Service Area	PLDS FY2006 Local Operating Revenue Per Capita (Income)	IMLS FY2005 Local Operating Revenue Per Capita (Income)
1,000,000 and above	\$29.04	\$26.54
500,000 to 999,999	\$31.03	\$31.10
250,000 to 499,999	\$29.10	\$26.68
100,000 to 249,999	\$28.79	\$25.20
50,000 to 99,999	\$33.65	\$26.30
25,000 to 49,999	\$44.23	\$30.45
10,000 to 24,999	\$36.57	\$29.21
5,000 to 9,999	\$60.53	\$26.63
Less than 5,000*	\$36.22	\$25.20

*estimated for IMLS

Figure 5. PLDS 2007 (FY2006) and IMLS FY2005 Local Operating per Capita, U.S. Libraries Reporting

to understand the range of funding sources that comprise "other funding sources." Library stakeholders and those unfamiliar with libraries benefit from reviewing these data and

discovering the complexity of public library funding. Having this periodic detail goes a long way in the education process. The ALA Office for Research & Statistics refers individu-

als interested in understanding more about public library funding to these PLDS supplemental reports.

Conclusion

So what does all this cross comparison tell us? The PLDS is a valid source for revenue and expenditures for the larger public libraries; it is not as reliable for libraries serving communities under 100,000 and less so for communities under 25,000 residents. Also, responses to services, staffing, and supplemental questions are valuable and may be used to understand emerging trends in library services—are funding rates dropping overall or in just some service area ranges, what is happening with staffing levels or hours open, are libraries spending less for materials, or are director salaries increasing or remaining static? These trends are visible if you compare the print reports side by side, but are very easy to identify in the online tool where multiple years of data may be compared. The *PLDS Library Trends* function supports

cross-analysis for 2006–08 data. Use it ... you'll like it. ■

PLDS 2007 (FY2006)

IMLS FY2005

Population of Legal Service Area	Percent Salary Benefits Expenditures per Capita	Percent Library Material Expenditures per Capita	Percent Other Expenditures per Capita	Percent Salary Benefits Expenditures per Capita	Percent Library Material Expenditures per Capita	Percent Other Expenditures per Capita
1,000,000 and above	64.7%	11.9%	23.5%	64.1%	12.3%	23.5%
500,000 to 999,999	63.6%	14.2%	22.2%	65.2%	14.1%	20.8%
250,000 to 499,999	63.4%	13.7%	22.8%	65.0%	13.3%	21.7%
100,000 to 249,999	65.5%	12.9%	21.7%	66.8%	12.9%	20.3%
50,000 to 99,999	64.6%	12.8%	22.6%	67.0%	12.6%	20.3%
25,000 to 49,999	64.5%	12.8%	22.6%	66.6%	12.8%	20.6%
10,000 to 24,999	65.6%	11.9%	22.0%	65.8%	13.0%	21.2%
5,000 to 9,999	65.0%	13.2%	21.8%	63.6%	14.0%	22.4%
Less than 5,000	59.7%	12.6%	27.7%	57.9%	15.7%	26.4%
Total:	64.3%	13.1%	22.6%	65.5%	13.1%	21.4%

Figure 6. Percent Total Operating Expenditures per Capita PLDS 2007 (FY2006) and IMLS FY2005, All Sources

References and Notes

1. Public Library Association, "Public Library Data Service Statistical Report," www.ala.org/ala/pla/plapubs/pldsstatreport/pldsstatistical.cfm (accessed Aug. 4, 2008).
2. The Public Libraries in the U.S. is a longitudinal data series published by the National Center for Education Statistics (NCES) until October 2007 when responsibility for collecting public library data transferred to the Institute of

- Museum and Library Services (IMLS). Information about the data series is online at <http://harvester.census.gov/imls/index.asp> (accessed Aug. 4, 2008).
3. The FY2005 IMLS universe was 9,189 library systems; the 2007 (FY2006) PLDS response was 851. See figure 1.
4. Information about Bibliostat Collect is available online at www.btol.com/pdfs/biblio_collect.pdf (accessed Aug. 4, 2008).

Does your library participate in the *Public Library Data Service Statistical Report*? Help us provide a better picture of what's happening in North American libraries. Send an e-mail to Kathleen Hughes, khughes@ala.org, if your library would like to participate in the upcoming survey.



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